

Application No. 09/362,021

REMARKS

In response to the Office Action of July 13, 2004, Applicants have carefully considered the rejections of the Examiner in the above-identified application. In light of this consideration, Applicants believe that the claims remain allowable. Applicants respectfully request reconsideration of the rejection of the claims now pending in the application.

In the first Office Action of April 1, 2003, claims 1-3, 16, 19, 20 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting over co-pending patent 09/362,022. Claims 1-22 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,555,557, to Mailloux (hereinafter Mailloux).

In the second Office Action of October 2, 2003, claims 1-22 are rejected under 35 U.S.C. §112 second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 1-6, 11, 12, 16, 17, 19, and 21 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,818,504, to Chung et al. (hereinafter Chung). Claims 7-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chung in view of Mailloux. Claims 13-15, and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chung in view of U.S. Patent No. 6,181,438, to Bracco et al. (hereinafter Bracco). Claims 18, and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chung in view of Bracco and in further view of U.S. Patent No. 4,847,641, to Tung et al. (hereinafter Tung).

In this third Office Action of July 13, 2004, claims 1, 4, 7, 16, and 19, are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,740,330, to Abe (hereinafter after Abe) in view of U.S. Patent No.

Application No. 09/362,021

5,835,123, to Chung et al. (hereinafter Chung '123). Claim 20 is rejected under 35 U.S.C. §103(a) as being unpatentable over Abe in view of Chung '123 and in further view of U.S. Patent No. 6,459,394, to Gwaltney et al. (hereinafter Gwaltney). Claims 8-10, 12-15, 17, 18, 21, and 22, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten. The rejection under 35 U.S.C. §112 second paragraph of claims 1-22 has been withdrawn. The Applicants wish to express their appreciation for the indication of allowable subject matter and the withdrawal of all previous rejections, particularly the withdrawal of the 35 U.S.C. §112 second paragraph rejections.

Claims 1, 4, 8, 16, and 19 have been amended. Claims 7, and 9, have been canceled.

Claims 1, 4, 7, 16, and 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Abe in view of Chung '123. Abe teaches how representative points are added to peripheral pixels in every black pixel groups. The thus generated representative points are joined by a curve-fitting approximation method to obtain an outlined curve for every black pixel group. One pixel is divided into a multiple number of sub-pixels. Pulse signals supplied to a laser is modulated on pulse width so that the sub-pixels (hatched section) belonging to the inside of each curve may be exposed to laser beams. However, Abe as is properly pointed out by the Examiner, does not teach Auxiliary pixels.

Chung '123 teaches compensation for pixel aberrations in a laser printer as accomplished by selecting pixels to be augmented, and providing additional optical energy to the selected pixels. In one embodiment, the pixels are selected by selecting pixels in combinations in which required pixel augmentation is indicated. The additional optical energy may be applied at the sub-pixel level so that a threshold of energy depletion on an optical

Application No. 09/362,021

photoreceptor (OPR) is not reached where image development would occur. The energy applied at the sub-pixel level results in enhancement of the selected pixels at an adjacent pixel location.

Chung '123, being concerned only with aiding against the wash out (see for example: Chung '123 column 6, lines 4 & 5) of *isolated* individual pixels (see for example: Chung '123 column 6, lines 31 & 32) teaches only the placement of "energy applied at the sub-pixel level" directly *adjacent* to those isolated pixels (see for example: Chung '123 column 6, lines 36 & 37). Thus, Chung '123 ignores and entirely fails to address the problem to which the Applicants' teaching is directed, namely lead edge deletion where the leading edges of image shapes are starved of toner, (see page 1, lines 17-21, page 5, lines 30-35 and page 6 lines 1-7 of the Applicants' specification), sometimes even to the point of no development *particularly as system throughput speeds are increased*. The Applicants' teaching is particularly focused on getting out in front of the leading edge, to start encouraging the toner cloud closer so as to insure proper toner accumulation. Thus, the claims as now amended more specifically call out that teaching for auxiliary pixel placement "spaced at least one pixel apart" (the specification support for which may be found in Figures 3, 6, 8, and particularly 10 & 11 of the Application). The claims as now amended are believed to overcome the reference to Chung'123 and the rejection under 35 U.S.C. §103(a) as being unpatentable over Abe in view of Chung '123. Allowance of claims 1, 4, 16, and 19, is respectfully requested.

Claim 20 is rejected under 35 U.S.C. §103(a) as being unpatentable over Abe in view of Chung'123 and in further view of Gwaltney. As claim 20 depends from a claim deemed allowable it should be allowable as well. The removal of the rejection for claim 20, is requested.

Application No. 09/362,021

Allowance of claims 1, 4, 8, 10, and 12-22 is respectfully requested.

It is respectfully submitted that the present set of claims as now amended are patentably distinct over the cited references. In the event the Examiner considers personal contact advantageous to the disposition of this case, she is hereby requested to call the undersigned attorney at (585) 423-6918, Rochester, NY.

Respectfully submitted,



Christopher D. Wait
Attorney for Applicant(s)
Registration No. 43,230
Telephone (585) 423-6918

December 1, 2004
CDW/fsl
Xerox Corporation
Xerox Square 20A
Rochester, New York 14644